White Oak Group

Quercus spp.

The white oak group includes but is not limited to white oak, (Q. alba L.), bur oak (Q. macrocarpa Michx.), post oak (Q. stellata Wangenh.), overcup oak (Q. lyrata Walt.), swamp white oak (Q. bicolor Willd.), chinkapin oak (Q. muehlenbergii Engelm.) and swamp chestnut oak (Q. michauxii Nutt.).

The white oak is one of the most common trees found throughout Missouri. It grows best on rich, deep, moist (but well-drained soils) though it can be found on all sites. It may be found in pure stands or mixed with red oaks, hickories, elms and sugar maples.

The sapwood of white oak is creamy white and the heartwood is light tan or brown. When freshly cut, the heartwood will often have a pink tinge. All white oaks have tyloses, which plug the vessels and pores. Not all white oaks are suitable for tight cooperage because some species have an abundance of pin knots which are not tight. The wood is strongly ring porous with large pores. It is hard, heavy, strong, fairly easy to work and machines well. White oak is difficult dry; it honeycombs and checks freely if extreme care is not used. Once dry, however, it is guite stable. The sanding and finishing qualities are excellent. It may be used in many of the same products as red oak. It is usually more closely grained than red oak. Ray fleck is very apparent on the radial section.

White oak has a variety of uses. When considering uses for red or white oak, it is important to remember that in most cases either group will suffice except when the wood is exposed to decay, as in boat parts, and then only white oak should be used. It follows that only white oak is acceptable for tight cooperage, not red oak. White oak is a fine wood for home workshops and is commercially available in quantities. It is especially good when strength and durability are desired.







